



# FLIP CHIP AND WAFER LEVEL PACKAGING MARKET ANALYSIS

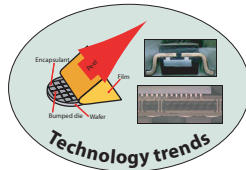
Despite a global recession in the electronics industry, with dramatic declines in the semiconductor industry, demand for flip chip bumping is growing. While some companies have delayed capacity expansion plans, others have entered the market with new bumping lines. The drivers for flip chip continue to be performance and pad limited designs, as well as form factor needs. In keeping with the environmentally friendly marketing movement, many merchant bumping operations have introduced lead-free alloys. This analysis provides an updated forecast of the flip chip wafer bumping market by product application, device type, number of wafers, and number of die. Included are projections for capacity (merchant and captive) and demand. Capacity is projected by number of wafers and bump type. The trend toward 300mm wafer bumping is also discussed. An increasing number of devices, from diodes to DRAMs, are shipping as wafer level packages (WLPs). WLPs are also growing in volume for a variety of low lead count ( $\leq 100$  I/O) applications. A discussion of the driving forces for WLP adoption by device type is included. Projections for wafer level packages (WLPs) are provided in both units and number of wafers.

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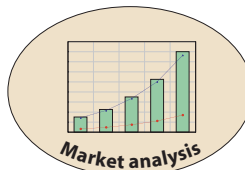
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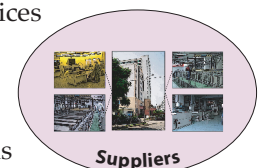
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